

## **BAB VI PENUTUP**

### **6.1. Kesimpulan**

Interaksi antara konsentrasi Na-alginat sebagai penjerat sel *Lactobacillus acidophilus* FNCC 0051 dan lama penyimpanan berpengaruh nyata terhadap jumlah sel yang terlepas dan karakter *carrier* (pH dan total asam susu UHT). Terjadi peningkatan jumlah sel yang terlepas, penurunan pH dan kenaikan total asam susu yang tidak sama pada konsentrasi Na-alginat yang berbeda selama penyimpanan. Peningkatan jumlah sel yang terlepas, penurunan pH dan kenaikan total asam (%) bergantung pada kombinasi antara konsentrasi Na-alginat tertentu pada level lama penyimpanan tertentu.

Selama 20 hari penyimpanan, jumlah sel yang terlepas pada konsentrasi Na-alginat 1%, 1,5% dan 2% berturut-turut adalah 5,9725 log cfu/ml, 4,9634 log cfu/ml dan 3,9807 log cfu/ml. Nilai pH dan total asam susu selama 20 hari penyimpanan pada konsentrasi Na-alginat 1%, 1,5% dan 2% berturut-turut adalah 6,1653; 6,250; 6,322 dan 0,1982%, 0,1635% dan 0,1189%.

### **6.2. Saran**

Selama penyimpanan produk *carrier* mengalami penurunan pH akibat perlakuan yang diberikan. pH akhir produk lebih rendah dibandingkan produk susu UHT yang ada di pasaran. Diharapkan peneliti selanjutnya melakukan uji kesukaan terhadap konsumen untuk mengetahui apakah perubahan karena perlakuan yang diberikan dapat terdeteksi oleh konsumen dan mempengaruhi penerimaan konsumen terhadap produk

*carrier* yang dihasilkan. Selain itu, dalam pembuatan produk sinbiotik selanjutnya yang menggunakan susu UHT sebagai *carrier*, diharapkan untuk mencoba menggunakan *strain* bakteri selain *Lactobacillus acidophilus* FNCC 0051 yang memiliki aktivitas metabolik lebih rendah daripada *strain* tersebut.

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